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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,052	12/06/2001	Monica Bokstrom	B&LAB-009	4387

7590 01/16/2004
Lerner David Littenberg
Krumholz & Mentlik
600 South Avenue West
Westfield, NJ 07090

EXAMINER

ALVO, MARC S

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/009,052

Applicant(s)

BOKSTROM ET AL

Examiner

Steve Alvo

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10-22-2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Applicant argues that the special feature linking the two inventions is not the "dewatering, shredding, transporting and ozone bleaching" of SHACKFORD, but is the "gas tight conduit ... for transporting the shredded pulp from the outlet of the pulp shredding device to the reaction vessel". Such special feature linking the two inventions is taught by WO 9605365. Thus Claim 11 is either obvious over or anticipated by WO 9605365. Accordingly, the special feature linking the two inventions, a gas tight conduit for transporting the shredded pulp from the outlet of the pulp-shredding device to the reaction vessel, does not provide a contribution over the prior art, and no single general inventive concept exists. Therefore, restriction is appropriate. The restriction requirement of Paper No. 6 is repeated and made **Final**.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 97/05324 in view of WO 96/05365.

WO 97/05324 teaches dewatering device (Figure 3) for dewatering the pulp to a consistency of at least 20% (20), shredding (80, 96) device (Figure 4) including a closed pulp shredding vessel (52), transporting conduit (106) and a reaction vessel (54) for bleaching the shredded pulp with ozone (74). WO 96/05365 teaches "gas-sealingly conveying" (page 2, lines 6-7) high consistency (page 2, lines 22-23) shredded pulp through a conveyor having a pulp inlet and outlet (page 2, lines 7-12). During operation the pulp is conveyed through conveyor 16', which carries screw 24 and shaft 22' is provided with breaker arms 40. The screw and

breaker arms would keep the pulp passing through the conduit non-compressed as they break up the pulp (page 4, line 25-page 5, line 4). WO 96/05365 teaches that in gas phase bleaching of pulp, downstream of the conveyor would be a vessel having a gaseous reagent which may be toxic or otherwise objectionable and teaches that it is important that the gas does not leak through the conveyor into the atmosphere (page 3, lines 14-22). WO 96/05365 further teaches gas sealing the conduit by using a pressure sensor (36) and differential controller (38) to maintain an upstream pressure greater than the downstream pressure to prevent leakage backwards through the conduit. It would have been obvious to the artisan to prevent the ozone gas of WO/97 05324 from leaking backwards through the pulp in conduit (106) using the pressure-sensor and pressure-regulating device of WO 96/05365. Claim 19; see breaker arms (40) of WO 96/05365.

Claim 22 is allowed over the art. However, the format of amended claim 22 is improper as set forth below.

Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The second paragraph in the body of the claim, e.g. the sub-paragraph starting with "a pulp shredding device...". Lines 4-6 of this sub-paragraph are indented to different degrees. This makes the format of the claim confusing. Correction is required.

The term "gas-tightly" in claim 22 is being interpreted as meaning that the connection between the outlet pipe to the reaction vessel is tight enough to prevent the passage of any gas, e.g. similar to air-tight.

The argument that it would not have been obvious to combine the two references as WO 97/05324 teaches away from countercurrent flow of ozone in the first stage is not convincing as the instant invention is drawn to preventing leakage of the ozone gas upstream through said outlet pipe. It is not limited to preventing of recycling the ozone, e.g. in countercurrent flow. WO 97/05324 teaches that the flow in the first stage is countercurrent. This is within the stage. It would have been obvious in view of WO 96/05365 to prevent the ozone gas of WO/97 05324 from leaking backwards through the pulp in conduit (106), e.g. from the second stage to the first stage, using the pressure-sensor and pressure-regulating device of WO 96/05365. Page 26 also teaches that the ozone in the second stage is co-current. If ozone passed from the second stage through conduit (106) to the first stage the ozone flow would not be co-current in the second stage of WO/97 05324. The countercurrent bleach gas is provided by source (74) not from conduit (106). See Figure 4, the bleaching gas enters at (74) and exits at (90).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number:
10/009,052
Art Unit: 1731

Page 5


When filing an **"Official"** FAX in Group 1730, please indicate in the Header (upper right) **"Official"** for papers that are to be entered into the file. The **"Official"** FAX phone number for this TC 1700 is: 703-872-9306.

Any inquiry concerning this communication or earlier communications from the **primary examiner** should be directed to **Steve Alvo** whose telephone number is **571-272-1185**. The Examiner can normally be reached on Monday - Friday from **6:00 AM - 2:30 PM (EST)**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Steve Griffin, can be reached on **571-272-1189**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Group receptionist** whose telephone number is **571-272-1700**.

MSA
January 9, 2004



STEVE ALVO
PRIMARY EXAMINER
ART UNIT 1731